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ABSTRACT

Studies from several countries are described in this review of literature pertinent to assigning day care children to multi-age or homogeneous age groups. Three issues are discussed in this regard: (1) What difference does it make how one groups children? The answer is that a profound difference to children, staff, and parents may occur in terms of social environment, curriculum design, success at school, and other factors. (2) What aspects of the child's development are affected by age grouping? The answer is that multi-age grouping positively influences social, emotional, and some learning outcomes, whereas homogeneous grouping seems to produce mastery of academic skills. Success of particular grouping choices depends on the end desired and on the skills of staff members. (3) How does age grouping affect the achievement of preschool goals? The answer to this question ultimately can be provided only by a center's staff and the families being served. Because research is still being conducted on the effects of grouping children under 6 years of age, the decision to place children in multi-age or homogeneous groups depends on program goals, client characteristics, center resources, and staff training and inclinations. (Author/DB)

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A COMPARISON OF MULTI-AGE AND HOMOGENEOUS AGE GROUPING IN EARLY CHILDHOOD CENTERS

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A COMPARISON OF MULTI-AGE AND HOMOGENEOUS AGE GROUPING IN EARLY CHILDHOOD CENTERS

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When parents leave their child at the day care center or nursery school door, they want to feel that they are giving their child something, that she or he will have the best possible experience--an experience that enriches what the family already provides. At the same time, the staff at a good center want to feel that they have designed and implemented the best possible program for young children that their interpretation of research data and familiarity with child development and the curriculum will allow, given the usual constraints of time and money. Thus, in an era when the demand, if not the supply, for day care and preschool is growing, both parents and teachers want to know what is best for the young child. A considerable amount of research and writing has been done which explores the nature and needs of the infant and preschool child, but it falls to the educator to use this information to design a good program appropriate to the children and the community.

One of the earliest decisions to be made in this respect concerns grouping of children. Whether the center serves 0- to 6-year-old children all day or 3- to 5-year-old children for 2½ hours, a number of alternative choices in grouping the children are possible. The choice of what ages to group together is fundamental, for many other decisions flow from this choice. Children may either be in homogeneous age groups with no more than 12 to 18 months difference between the oldest and youngest, in multi-age groups where the spread may be as wide as 5 or 6 years, or somewhere in between. Several kinds of questions need to be answered

when deciding on group composition with respect to age. What difference does it make how one groups children? If there is a difference, which aspects of the child's development are affected by age grouping? How does age grouping affect the achievement of preschool goals?

Surprisingly, little research has been specifically directed toward these questions. Researchers have not looked at a multi-age group facility and a homogeneous group facility and systematically explored the differences in terms of a wide range of variables. Certainly this is true for preschool groups, and also for many authors (e.g. Goodlad and Anderson, 1963) who deplore this lack of concrete data for elementary schools as well. Perhaps this is because teachers and other in-house and direct service staff write and publish little while psychologists and researchers tend to look at more narrow, specific, and scientifically testable issues, such as the frequency and complexity of language or the degree of interaction in a controlled environment involving same-age or different age children. Although such investigations have not directly addressed the question of what kind of classroom is best for the young child--with whom can she or he most profitably and happily spend the hours away from home--they do enable one to draw inferences about grouping.

AGE TERMS AND PROGRAM TERMS

In exploring the questions raised earlier, terms will be used which have no standard definition in the literature and which must, therefore, be stipulated here. A homogeneous age group refers to a group of children who spend all or almost all of their school or center day in a group in which the youngest child is no more than 18 months younger than the oldest. Other terms for homogeneous age groups include horizontal group or single age group. A heterogeneous age group is one in which the age

difference between the oldest and youngest child is not less than two years. Other terms commonly found in the literature for the heterogeneous age group include multi-age, inter-age, family group, or vertical group.

An interesting mix of terms occurs in the relevant research literature. Apart from a scarcity of data dealing with age rather than ability grouping, program terms are sometimes used as if they were interchangeable with age terms. Thus, one often finds an investigator talking about a heterogeneous or multi-age group in one part of a report, and about an open or unstructured group in another part. It is essential to observe a distinction between terms based on age and age grouping (heterogeneous, homogeneous, multi-age, vertical group, or sibling group) and terms based on program, class, or curriculum organization (open, integrated, unstructured, or closed structured).

HISTORICAL PERSPECTIVE

For school-age children, the one room schoolhouse was the norm until large concentrations of people in one area (urbanization) made feasible separation by age into many classes. For preschool children, group care outside the home has been a fairly recent innovation. (For a thorough discussion of historical trends see Auerbach, 1979; Breitbart, 1974; Joffe, 1977; Marver & Larson, 1978; Robins & Weiner, 1978; Stevens & King, 1976; Takanishi, 1976.) Additionally, as child development theories evolved, so too did a picture of children growing by stages in all their capacities (physical, cognitive, and social). This view has reinforced a pattern of homogeneous grouping in which children of the same age, and presumably stage of development, are kept together. Lists or displays of the developmental characteristics typically found at each age and the

developmental levels a child needs to reach before he or she can proceed to following stages (such as one finds in Gesell, Piaget, and Erikson) have strengthened the view of some educators that mixing age groups hinders children's social, cognitive, and emotional growth. This view is, however, open to question. Satterly (1975), for example, argues that stages in the Piagetian or Eriksonian sense should be seen as a logical model rather than as an actual description of how children think at each age. He points to the large variation of development within any age group and argues that such models should not be taken as literal principles for organizing classrooms.

Two recent texts (Broman, 1978; Lay & Dopyera, 1977) both intended for use in teacher training courses, also reveal differing views of child development with respect to stages, as reflected in their chapter headings. Lay and Dopyera organize their text topically around children's affective, social, and cognitive behavior into two categories: before age 3 (infants and toddlers) and ages 3 to 7. Broman, on the other hand, devotes separate sections to the 3-year-old, 4-year-old, and 5-year-old, subsuming developmental questions under more rigid age categories. In short, the preschool staff is faced with an array of research reports and discussions reflecting differing approaches to the education and care of the young child. In deciding between homogeneous and multi-age grouping, educators must rely on their ability to intelligently interpret available data and to be sensitive to the needs and values of the client population.

THE EXPERIENCE OF OTHER COUNTRIES

While the United States has been most innovative in developing early education programs, it has lagged behind other countries in financially supporting such programs. Kahn and Kamerman (1976), in a study of

child care programs in nine countries (France, the United States, Canada, Germany, Israel, Poland, Sweden, the United Kingdom, and Yugoslavia), report that with the exception of the United States and Canada, these countries are moving towards public voluntary preschool education for all children over the age of 3 years.

Austin (1976), in his examination of early child care in other countries, notes that "in most countries, children are grouped by single year of age; some countries allow two year age groups such as 3 and 4 year old children in the same class" (p. 48). In France, the day care center is generally restricted to infants and toddlers. These children are usually divided into four groups: 2 to 8 months, 8 to 18 months, and 24 to 36 months. The older preschoolers (ages 2 to 6) attend age graded nursery schools (see Kamerman, 1977).

In Sweden, note Bergstrom and Gold, there is the usual separation of infants from older children. "Grouping of children according to age is a state regulation. The state, at the urging of the medical profession, has required age grouping in an attempt to avoid the spread of diseases and epidemics among the younger children in the day nurseries" (Bergstrom & Gold, 1974, p. 26). Austin reports, however, that Sweden "is experimenting with sibling groups which span the ages of 2½ to 7 years. The older children are taught responsibility for the younger ones" (1976, p. 48). A report published by the Swedish Ministry of Education and Social Affairs (1979) describes an experiment conducted since 1976 in which children 7 months to 12 years of age are grouped together with older children joining the younger ones after school. These heterogeneous groups are described as very successful; conflict among the children is reduced because children of different ages make different demands on the teachers, there is

less fighting for the same toys, and younger children see the way the older ones resolve conflicts. In addition, the older children seem to enjoy responsibility for the care of the younger children. The advantages for parents of these widely mixed age groups include dealing with the same staff throughout the child's time at the center, opportunities for parents to get to know each other, and opportunities for parents of older children to reassure parents of younger children. According to the report, staff find these groups more stimulating, and they have more incentive to be involved with children and parents they expect to work with for a long time. Staff also find this situation helpful because they come to know the children well as they develop over the years.

In Denmark, the government supports not only services for children below school age but also after-school groups for all youngsters through high school. Generally, such centers house everyone in one facility--infants as well as adolescents who are in the after-school group. As Wagner and Wagner (1976), in their study of the Danish national child care system observe, "Danish day-care programs seem to recognize the importance of another type of social interaction for children - that of older and younger children together" (p. 78). Hjartarson (1979) also notes that in recent years Denmark, like Sweden, has encouraged family day care groups that include children ranging in age from infants to 12-year-olds.

Despite emphasis on collectivization and social interdependence, preschoolers in the Soviet Union are placed in homogeneous age groups: one is responsible for one's peer, not older for younger (see Educational Testing Service, 1969).

Cuba provides an interesting case history well chronicled by Leiner (1974). A state system of child care is available on a voluntary basis for

children 45 days to 6 years of age. Facilities include provisions for day care, boarding, mixed boarding and home care, depending on family need and availability of space. (As in other countries, Cuba is unable to provide sufficient places for children to meet the demand.) Groups are multi-age in the sense that they cover more than a year's range. Four distinct groups are apparent: 45 days to 18 months (although usually these infants are further divided into 3-month units), 18 months to 30 months, 30 months to 5 years (the widest range and most analogous to the child care age range in the United States), and 5 to 6 years. For a brief time in Cuba, day care centers called jardins were available. These centers were less regimented than the traditional centers, had open planning, and were largely outdoors. They accommodated children 18 months to 5 years in a multi-age group. As one jardin psychologist explained, "We believe in inter-aged mixing. The little ones learn from the big ones and the big ones learn from the little ones--in play, in responsibility, they all learn" (Leiner, 1974, p. 111). Lela Sanchez, one of the founders of the jardin system, stated, "We feel that from the age of 1½ to the age of 4 it is a very positive thing for children to be grouped together ... it seems to us that at this early stage it is easier for a child to learn from other children than from an adult" (Leiner, 1976, p. 111). However, by 1971 the jardin experiment was phased out. The jardins were merged with traditional programs and the two leaders of the jardin program were assigned other social welfare work. The official position is that the jardins did not promote sufficient discipline, which in turn could prevent children from learning as much as they should in their early years.

A point to be raised here and returned to later is that age grouping appears to reflect the goals, even the national goals, of a program. Where

the primary goal is to produce open, sociable children who are able to accept and give help, heterogeneous grouping is preferred. Where the goal is to teach a set body of material and to formalize the relationship between dependents and caregivers, homogeneous grouping is favored.

COMMON GOALS AND CONCERNS IN PRESCHOOL PROGRAMS

While different programs stress different things and have different approaches, there are some common concerns--such as acquisition and elaboration of language. Expanding a child's general knowledge is another concern. Many programs stress development of logical thinking. Most are concerned with the socialization of the young child, that is, his or her ability to get along with others and to be a contributing member of the group. All programs seem to emphasize that children meet their goals while emerging with strong, positive self-concepts.

Language Development

Language development is an obvious target of comparison in same-age and multi-age groups. If young children are with same-age peers, will they not tend to have "collective monologues" with limited vocabulary, infrequent verbal exchanges, and dependence on adults for language expansion? On the other hand, in a heterogeneous group with more child-to-child interaction, won't the younger children become an audience for the older, and be unable to get a word in edgewise?

Conversation between two children requires minimally three things: sufficient vocabulary to express thoughts, sufficiently developed syntax to communicate without the listener having to depend on contextual clues or to make a large number of suppositions[1], and a decrease in egocentrism to allow for judging whether a sentence is understood by another and for

understanding the perspective from which another is speaking. Given these three requirements, will children expand vocabulary, develop syntactical skills, and decrease egocentrism more in homogeneous or heterogeneous groups? Hamilton and Stewart (1977) found that children learn vocabulary from each other in settings with a variety of age groups. While they imitate adults more in terms of complexity and sentence length, they learn vocabulary rapidly and easily from other children, even when the vocabulary is completely foreign. These authors also point to the language gains frequently made when a child is promoted to the next older age group in a center. They speculate that adult language may be too complex for a child to absorb all the nuances, while the language of the next oldest group of children may be "just right." As children in Hamilton and Stewart's study became older, they imitated adults more and peers less. One might conclude from this study that in terms of language development the greatest benefit of heterogeneous grouping is in the very early years of rapid language expansion. In support of this, Mueller (1972) indicated that the processes important for verbal exchanges develop by age 3½ and that thereafter there is no significant difference in effective communication between older and younger children.

With respect to syntax, a study by Bates (1975) offers a somewhat contradictory finding to that of Hamilton and Stewart (1977). Bates found that children's utterances are longer when they speak to adults than when they speak to other children. Perhaps the adult conveys an expectation of more complete utterances, perhaps the child imitates the adult speaker, perhaps the adult is more patient or throws in more cues to encourage and facilitate longer sentences. Bates does not say, although she observes that "there must be something about child-child speech--other than its

grammatical simplicity--that is qualitatively different from conversations between children and adults, rendering peer input less useful for the child acquiring his native language" (1975, p. 267). Perhaps there is less of a conflict between Bates, and Hamilton and Stewart if one sees the former as addressing sentence length and complexity only and the latter as addressing vocabulary and ease of communication with a peer.

Bates does make an interesting observation about young children's egocentric speech, which is usually assumed by Piagetians to reflect their generally egocentric mental outlook. She suggests that the child's egocentric speech may be more a reflection of the child's insensitivity to cues from the listener that he or she has not understood than to failure in the child's ability to role take or decenter. In support of this idea she cites a study by Peterson, Danner, and Flavel (1972) with 4- and 7-year-olds. These researchers found that when children were told that the listener did not understand their first utterance and were asked to repeat it, they had no difficulty in augmenting and elaborating. Furthermore, Bates suggests that the reason children respond less to cues that the listener has not understood is that other children produce fewer such cues than do adults. Dittman (1972) confirms this for first, third, and fifth graders. Adults are more likely to indicate understanding through such cues as nodding, or saying "uh huh," or indicating misunderstanding through such cues as saying "what?" or looking clearly puzzled. The ability to acknowledge understanding or misunderstanding of the speaker increases dramatically between ages 2 and 4 (Bates, 1971), signifying that in heterogeneous groupings, older children may contribute to a decrease in the "egocentric" speech of young children by asking them for clarification of their statements.

The significance of the above studies for grouping, as with most of the available research, must be inferred but would seem to point to some advantages in multi-age grouping for children's language development.

Social Development

When one turns to social development, the advantage of heterogeneous grouping is more clear. Charlesworth and Hartup (1967) looked at the amount and kind of positive social reinforcement preschool children gave each other and found that 4-year-olds gave more reinforcement to other children than did 3-year-olds. Further, 4-year-olds distributed this reinforcement to more children than did 3-year-olds. The advantage for the 3-year-olds is unmistakable. Hartup (1977) studied positive social interactions in same-age and mixed-age pairs of preschool children. (Same-age pairs differed by an average of only 2 months in age while mixed-age pairs differed by an average of 16 months.) Hartup found that the greatest positive social interaction occurred in same-age older pairs, the least in same age younger pairs, with mixed-age pairs falling in between. He observes, "The study only establishes the fact that both younger and older preschool children make behavioral adjustments to the cross-age situation. In each case, behavior differs from the same-age situation" (p. 11). Hartup also points to studies which indicate that older preschool children (particularly those 2 or 3 years older) act as peer models for the younger children.

Much of the research on cross-age social interaction has been done with older children, but it probably has validity for younger children as well. Mobley (1976) studied leadership in grades 1 to 3 in homogeneous and multi-age settings and found that the self-concepts of students in the multi-age group improved while those of the children in the homogeneous

group did not. Buckholdt and Wodarski (1974) reviewed a number of studies, conducted at CEMREL, which examined how different reinforcement systems affect 3- to 11-year-old children's cooperative, competitive, and learning behaviors. Among the results was the fact that preschool children who acted as tutors for each other and who were given intermittent rewards by an adult were found to be very good at helping each other: they innovated effective teaching techniques and seemed to enjoy learning from and teaching one another. Buckholdt and Wodarski conclude that when preschool children of varying ages are grouped together, allowing each to serve as a teacher to some other at some time, group interaction may be enhanced by improving interpersonal and cooperative skills; by improving social perspectives, role-taking, and empathy; by reducing anxiety caused by status, age, and background differences between adults and children; by increasing individualized instruction in the group with the further reward of immediate feedback for the learner; by improving the "child-tutor's" communication skills; and finally, by providing motivation for a task that may be lacking when a child is working alone.

Turning to very young children, Lewis, Young, Brooks, and Michalson (1975) studied the different kinds of interaction behaviors evident when children were paired either with same-age children (1-year-olds with 1-year-olds), or with older children (1-year-olds with 15- to 20-month-olds), or with younger children (1-year-olds with 7-month-olds). The authors found that:

> ...imitation occurs more frequently with unequal age mates; body contact is more frequent between age mates. This suggests... that various functions are facilitated or retarded by age composition of peer relationships.... Therefore the function as well as the age composition of relationships must be considered. (Lewis et al, 1975, p. 59)

that the social skills of first and third graders improved in multi-age groups, this was not true for reading scores, which remained the same between the two groups. Math gains were markedly greater in homogeneous groups. On the other hand, Mycock (1966) found no significant difference in reading or math skills between vertically or homogeneously grouped infant school classes (ages 5 to 7). However, she reports that slow learners did better in vertical groups while the brightest children made greater gains in homogeneous groups.

Preschool programs with predominantly cognitive or skill acquisition goals such as DISTAR or DARCEE are ability grouped within classes that generally contain same-age children. Programs with broader or more social goals, such as Bank Street, are more likely to have children of wider age ranges. Montessori schools explicitly call for putting 3-, 4-, and 5-year-olds together. "One reason for the mixture of ages in the [Montessori] preschool class is that younger children are expected to imitate older children in their behavior" (Miller & Dyer, 1975, p. 27). However, Miller and Dyer add that the multi-age group does not appear to be a significant variable with respect to learning.

In summary, research on homogeneous versus heterogeneous groups in preschools is very limited. However, from studies on the language, social, and cognitive development of young children it appears that many benefits flow from multi-age grouping in preschools where the goals are not so exclusively cognitive as they later become in elementary school. (A significant exception to the general elementary school pattern is the modern informal British infant school, further discussed below.)

PRACTICAL CONSIDERATIONS

Single-age Groups

The most common arrangement for preschool grouping is the homogeneous group. This prevalence of, if not preference for, homogeneous grouping in preschools must be explained since research evidence alone cannot support it. Through a historical coincidence, larger numbers of children needed group care at a time when maturationist and stage theories of development were also on the ascent, thus providing a rationale for keeping children of the same supposed stage together. There are also practical reasons for such an arrangement: for example, younger children tend to use materials differently than do older ones. A large tray of macaroni set out for the 3- or 4-year-old to string is a great attraction for the 2-year-old to dump or eat. A 5-year-old's elaborate block construction invites the 2-year-old to explore what will happen if he pushes it. The patience required in waiting for a turn at a game or in solving a cognitive problem may be easily manageable for the 5-year-old but beyond the limit of frustration for the 3-year-old. Thus, in planning activities, it is easier for the teacher and for some of the children if a similar response to an activity can be anticipated from most of the children in the group.

A related problem is that it may be difficult to accommodate in a small space children of all ages. If a center has limited room, a choice may have to be made between climbing equipment for the 4-year-olds and a small slide for the 2-year-olds. Little direct research is available on the amount and kind of space needed by children of different ages. Loo (1976) studied the effect of high and low spatial density on 5-year-olds and found that aggression increased with density, particularly for boys. Increased "onlooking" behavior from others also occurred, causing a pas-

sivity that reduced interaction and learning. Loo observes that in a high density situation children may become "catatonically immobile." The low density condition produced more self-involved behavior and more toy play. This study raises the question of whether younger children may be more sensitive to density than older children and may thus do more onlooking than participating in a room shared with active 5-year-olds. Many teachers have observed that older children seem to need more space than younger children and that noise and confusion is harder on the 2- or 3-year-old than on the 4- or 5-year-old. From a teacher's point of view she or he may prefer, when working with younger children, a smaller space in which it is easier to provide close supervision unobtrusively. In sum, the physical setting of a room--space, equipment, material--may be easier to arrange appropriately if the children are likely to use it in the same way, and teachers may perceive this as an argument favoring homogeneous grouping.

Planning the program is a matter of paramount concern to staff. Most teachers believe (and have been taught) that certain activities are appropriate to certain ages and that children must master one set of skills before going on to the next. Generally speaking, it seems simpler to plan for one age group. It is probably most efficient to teach a body of knowledge all at once to a group of children who are ready to learn it and not yet beyond it. In mixed-age groups, whole group activities must be more carefully chosen and small groups more carefully arranged.

With respect to social development, homogeneous grouping can best be defended if one believes that young children under age 3 are capable of parallel play only. If this is so, children older than 3 years in a mixed-age group would have fewer playmates at their level with whom to interact.

In fact, it may be that younger children are happier in a smaller group than are older ones, and that the optimum group size at each age may vary sufficiently to argue for homogeneous grouping. All this remains speculative in the absence of research. What is more certain is that tradition and habit are hard to break and most teachers seem to believe that homogeneous grouping is better because it is familiar to them.

Multi-age Groups

While homogeneous grouping refers to one kind of class arrangement, multi-age grouping opens the door to a wide range of arrangements. In a day care center serving 0- to 5-year-olds, decisions must be made not only about combining the 3-, 4-, and 5-year-olds) but also about where to place those over 12 to 18 months. Infants under that age are always kept separate for health, safety, and obvious program, scheduling, and staffing reasons. But what about the toddlers? Should they too be kept separate from their more verbal and mobile schoolmates?

Konner (1975) surveying evidence from primate and preindustrial societies argues strongly for the multi-age group to include toddlers. He points out that throughout human history (and even today) the play group has always included infants and juveniles because the number of same-age peers was small. Responsibility for the care of infants was shared in these play groups, allowing for modeling of child care among the juveniles. From the younger child's point of view, Konner argues:

> ... the benefit to any play group member for whom there are older individuals around is greater than that which would accrue to him in a peer group, since the things that need to be learned are learned more easily from those a little ahead of oneself than those, so to speak, in the same quagmire. (1975, p. 103)

Further, Konner contends that peer relations in infants are a product of "laboratory investigations and of child care conditions in advanced indus-

trial states ..." and that the reason infants do not relate well to each other is that throughout "millions of years of evolution" they were never required to do so. Obviously, a preschool with teachers and a program focused on the child's development is not the same as a band of infants and juveniles in which infants can learn only from the example of the older children. Nevertheless, Konner's points should be considered by those who see the homogeneous age group as the "natural" order of things.

There is a wealth of literature on peers as models, and there would seem to be little question that children learn from each other. With a wider age range, there is presumably a wider range of behaviors to model, and while younger children may imitate older ones in the classroom, perhaps the older children will imitate their younger peers in the nap room!

From a sociological viewpoint, the multi-age group more closely reflects life at home and, in fact, everywhere except at the traditional school. People do not usually group themselves in narrowly horizontal age groups. Family day care (as opposed to center care) frequently includes infants and older children, and good family day care seems to be an effective model for children's development. Similarly, play groups or small cooperative groups are usually multi-age; separate groups are a luxury of the larger centers, where there are enough children to allow for separation.

Before turning to specific classroom management issues in heterogeneous groups, the mainstreaming of handicapped children should be considered. That handicapped children have a right to develop to their fullest potential in a normal setting and that "normal" children grow in important ways when accommodating special classmates no longer seem to be issues. Preschools are especially easy and successful places to mainstream

handicapped children, and multi-age classes further facilitate this. When there are children with a wide range of verbal, manipulative, physical, social, and cognitive skills in the room, the handicapped child is simply another variation.

In regard to classroom management, a number of arguments favoring heterogeneous groupings are evident. Research has been cited above which indicates that children can be effective teachers of other children, both through direct tutoring and through example. Although a heterogeneous class can be more difficult for the teacher to manage, in that all instruction must be individualized, allowing older children to help younger children will probably facilitate that individualization. In addition, the "student" is provided with immediate feedback on his or her performance, while the "tutor" solidifies mastery of a skill by having to explain it. In these situations, older children may also improve their social skills, and both older and younger children may more readily learn to decenter and take the perspective of others when brought frequently into contact with children who see things from a different perspective. Wakefield (1979) cites Zajonc and Markus's (1975) finding that intelligence scores are inverse to birth order and speculates that the explanation for this finding may partially be that younger children have less opportunity to teach others. Thus, Wakefield argues that the teaching of younger children by older not only facilitates classroom management for the teacher, but also is a valuable learning activity for older children in itself.

While multi-age groups make special demands on the teacher in terms of planning, programming, and keeping track of each child's progress, there are advantages. Any one group is made up of children both familiar and unfamiliar with the program, thus aiding continuity. Teachers may

gain a stronger sense of sharing with colleagues when each teacher has children of approximately the same age range. Additionally, some teachers may find the challenge of planning activities for the multi-age class intellectually stimulating. For the director, staffing may become more flexible if every teacher is used to working with all ages. Like all age groups, multi-age groups call for good teachers who are sensitive to children, knowledgeable about child development, and skillful at planning. However, staff of heterogeneous groups may require more extensive training than staff in a homogeneous setting.

The informal British infant school is the most often cited example of multi-age classes. While these schools serve children from 5 to 8, their guiding philosophy and practice seem applicable to younger children as well. Some of the advantages that may apply equally well to preschools are reflected in the observations of Ridgway and Lawtor. (1968), who note that infant school teachers stated that they found working with children of all ages to be intellectually stimulating. The teachers also commented that older children were given a chance to be responsible for other children and that a "family-like" spirit developed in which everyone helped each other. Ridgway and Lawton write that "...where teachers have had no experience of family grouping, opposition to the idea stems from lack of conviction about informal methods of teaching rather than the actual mixing of age-group" (1968, p. 162).

Not to be overlooked is the children's preference in grouping. Leiner (1974) recounts an amusing observation that suggests that even young children prefer to be with older ones rather than to be separated from them. In reference to a group of 18- to 24-month-old babies he writes:

> While the day care worker tried to lead the children in a song... [the children] were continually distracted by a group of older children across the field. Even after the assistente adjusted the seating arrangements to allow more children into the circle in order to hold their attention, the youngsters failed to respond; their interest in the activities across the field never flagged. (1974, p. 79)

Lewis and Rosenblum (1975) suggest that the heterogeneous, single-room schoolhouse of the past in which the teacher taught the older children who in turn taught the younger children may "not be as far-fetched as has been suggested by some..." and that "models in which children teach other children need to be considered" (p. 8). Dixon (1978) observes that grouping together children of varying ages has developed without theoretical justification for the practice. She contends "...that it is possible to justify vertical grouping by reference to research but only if it is accepted that emphasis is given to certain underlying values" (1978, p. 19, emphasis mine).

CONCLUSION

The decision on whether to age-group children homogeneously or heterogeneously depends on the goals of a program, the client population, the resources of the building, and the training and inclination of teachers and administrators. Some multi-age classes have foundered because the teacher failed to individualize the program. Some homogeneous classes have been less successful than they might have been because the teacher planned a program which depended on the children having a range of skills which they did not, in fact, have.

Although this chapter has not directly addressed program structure and content (i.e. either open and individual or structured and large group oriented), the most successful combination of age grouping and program structure may be multi-age in an open program. Palmer (1971) suggests

that a good solution is to have multi-age classes with "working groups," where children come together of their own choice, and "teaching groups," where the teacher organizes the participants to accomplish a specific purpose. Both kinds of groups are temporary, lasting for the duration of the task or the children's interest.

Finally, what answers emerge to the questions raised at the beginning of this article?

1. What difference does it make how one groups children?

   It may make a profound difference to children and staff and, by extension, to parents. For children, group composition seems to affect their social environment, their learning environment, their expectations about program stability, and their sense of self, self-esteem, and self-competence. For staff, group composition may have major implications for curriculum design, classroom management, relations with colleagues, and relationships to children and their families. For parents, grouping may affect their child's comfort and success at school, and their relationships with teachers and the support group of other parents.

2. Which aspects of the child's development are affected by age grouping choice?

   Generally speaking, research appears to give some support to multi-age groups with respect to their social and emotional development, as well as to some aspects of their learning. Homogeneous groups appear to be most effective for mastery of specific academic skills. However, it is essential to remember that grouping practices should not be used as a <u>substitute</u> for a

program--children are grouped in particular ways in order to achieve particular ends. Homogeneous grouping does not necessarily impoverish a well-balanced program, nor will vertical grouping in and of itself improve a rigid and unimaginative one. The success or failure of a program rests with staff and their particular skills and inclinations. Grouping offers an opportunity for children to maximize certain kinds of experiences. What those experiences will be reflects staff values, preferences, and abilities.

3. How does age grouping affect the achievement of preschool goals?

Ultimately, this is the crucial question, and it can only be answered by the center staff and the families they serve. The very process of clarifying values through a discussion of grouping choices is undoubtedly beneficial in itself.

Until much more research is done on the effects of grouping children under 6 years of age in heterogeneous and homogeneous groups in preschool centers, the choice would seem to be a matter of style and goals. However, because the preschool is a child's first sustained out-of-home experience, conditioning his or her expectations about teachers and peers, and encouraging social and cognitive growth, educators should think critically before making any decision on age grouping of children.

Footnote

[1] In child-adult exchange, particularly parent-child, the adult is able to compensate for lack of verbs and generally "thin" syntax by making a

number of suppositions or assumptions. For example, when a child says "Juice," the adult can infer that the child means "I want some juice" or "That can on the shelf contains juice," depending on context. Similarly, "Susie see" may mean "I see this." The point is, an adult or older child can fill in the missing syntax to understand the child's meaningful utterance; same-age peers may not.

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